

Signify Classified - Internal
Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269



Scaled data based on original data using
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

Brand: McGRAW-EDISON

Report Number: P637980

Luminaire Tested: GWS-SA4D-830-U-SL3-W-HSS

Issue Date: 1/10/2023

Test Information

Test Method: LM-79-2019
Report Number: P637980
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2209-782-34)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 1/10/2023
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: McGRAW-EDISON
Catalog Number: GWS-SA4D-830-U-SL3-W-HSS
Description: GALLEON WALL SLIM LUMINAIRE. (4) LIGHTSQUARES WITH 16 LEDS EACH AND TYPE III SPILL LIGHT ELIMINATOR OPTICS WITH HOUSE SIDE SHIELD
Light Source: (64) 3000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 15756 lumens
Efficiency: N/A
Efficacy: 97.2 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type III - Short
BUG Rating: B2 - U0 - G3

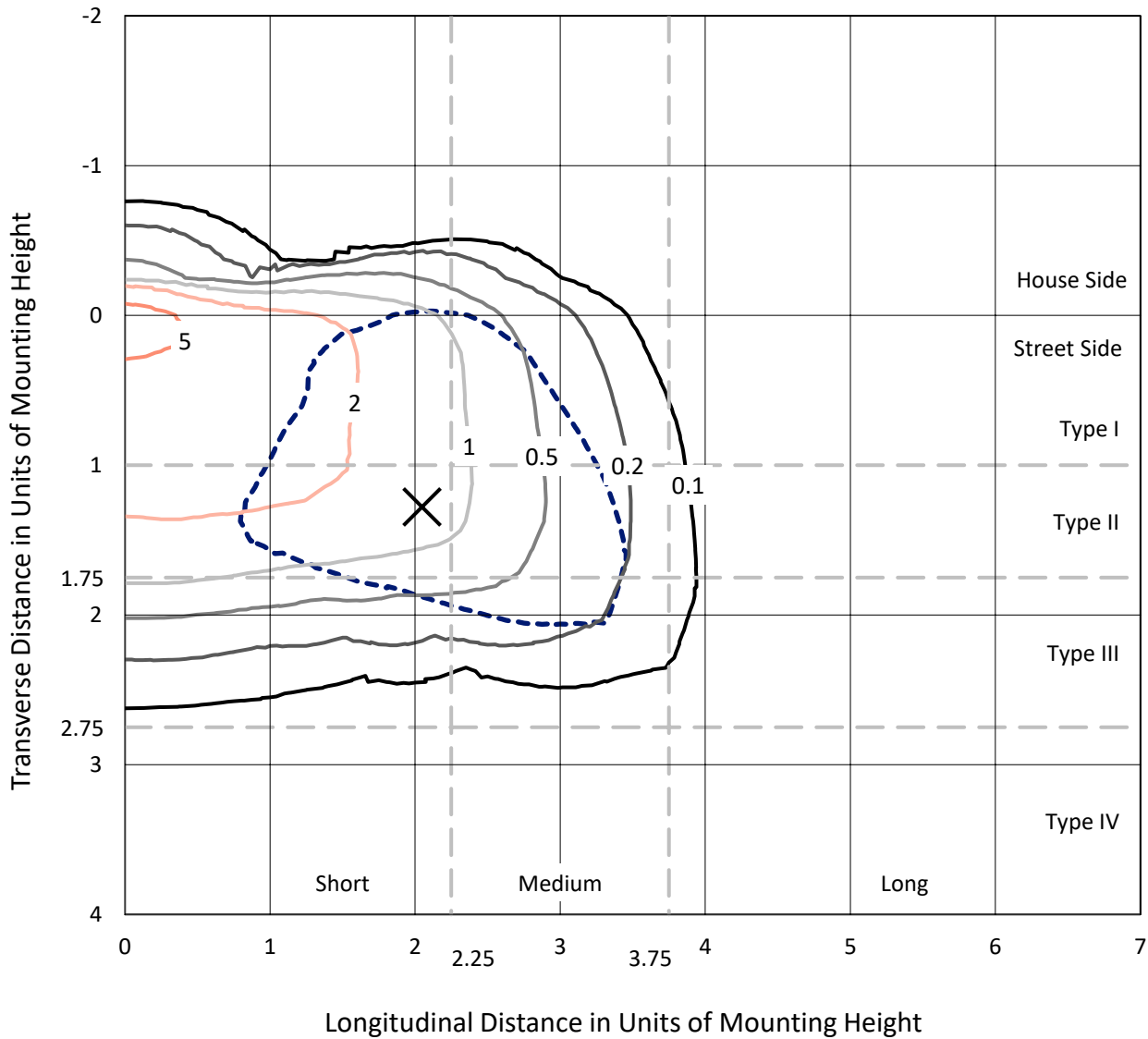
Input Watts (W): 162.1
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 0
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

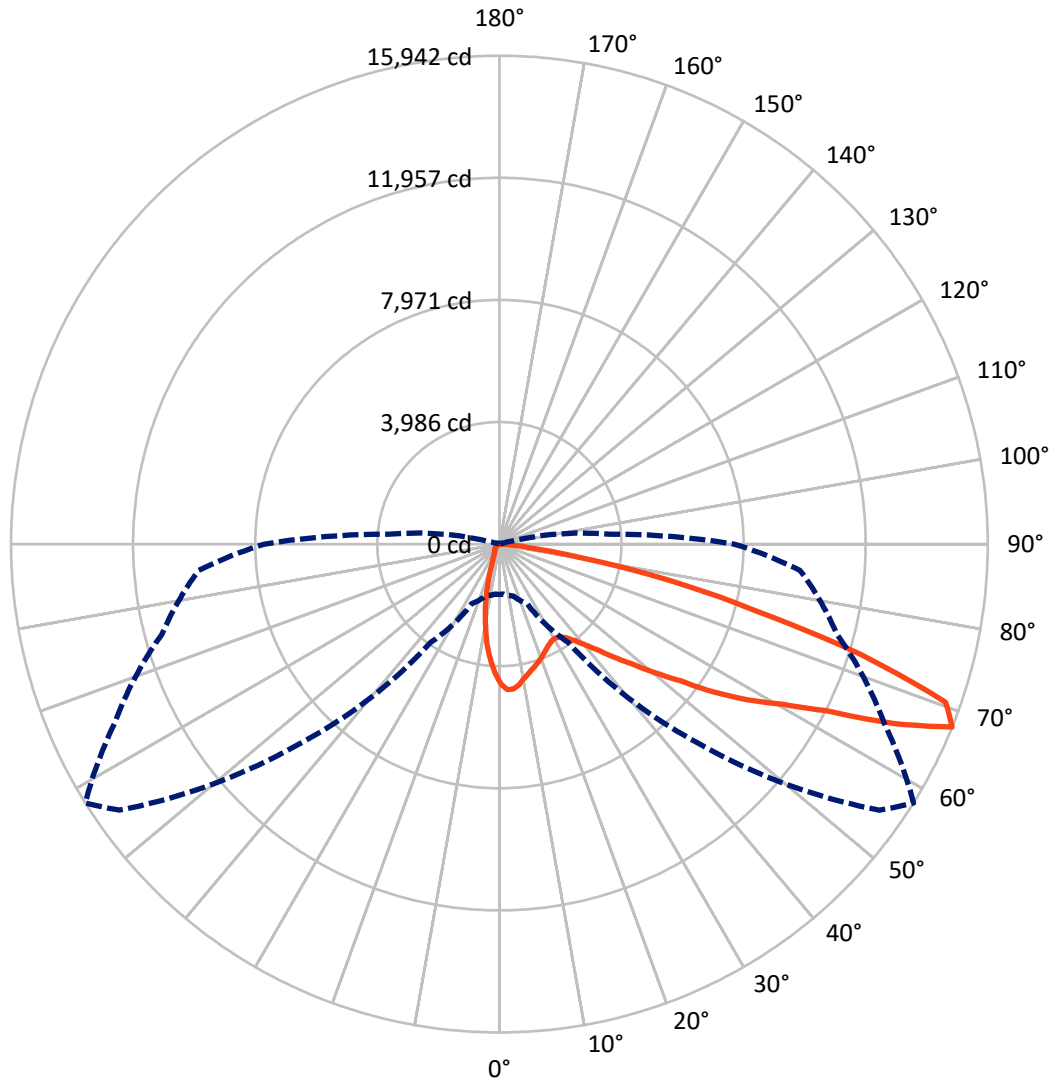
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 7.3 fc
 Type III - Short - N/A

REPORT NUMBER: P637980
CATALOG NUMBER: GWS-SA4D-830-U-SL3-W-HSS

Luminous Intensity Polar Plot



— Vertical Plane Through 58-Deg Lateral - - - Horizontal Cone Through 67.5-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1539.3	0.0	1539.3
	% Fixture	9.8	0.0	9.8
Street Side	Lumens	14216.7	0.0	14216.7
	% Fixture	90.2	0.0	90.2
Total	Lumens	15756.0	0.0	15756.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	369.3	2.3
10°-20°	768.8	4.9
20°-30°	1036.7	6.6
30°-40°	1456.8	9.2
40°-50°	2249.9	14.3
50°-60°	3597.9	22.8
60°-70°	4260.2	27.0
70°-80°	1884.6	12.0
80°-90°	131.8	0.8
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-90°	15756.0	100.0
0°-180°	15756.0	100.0

Coefficient of Utilization



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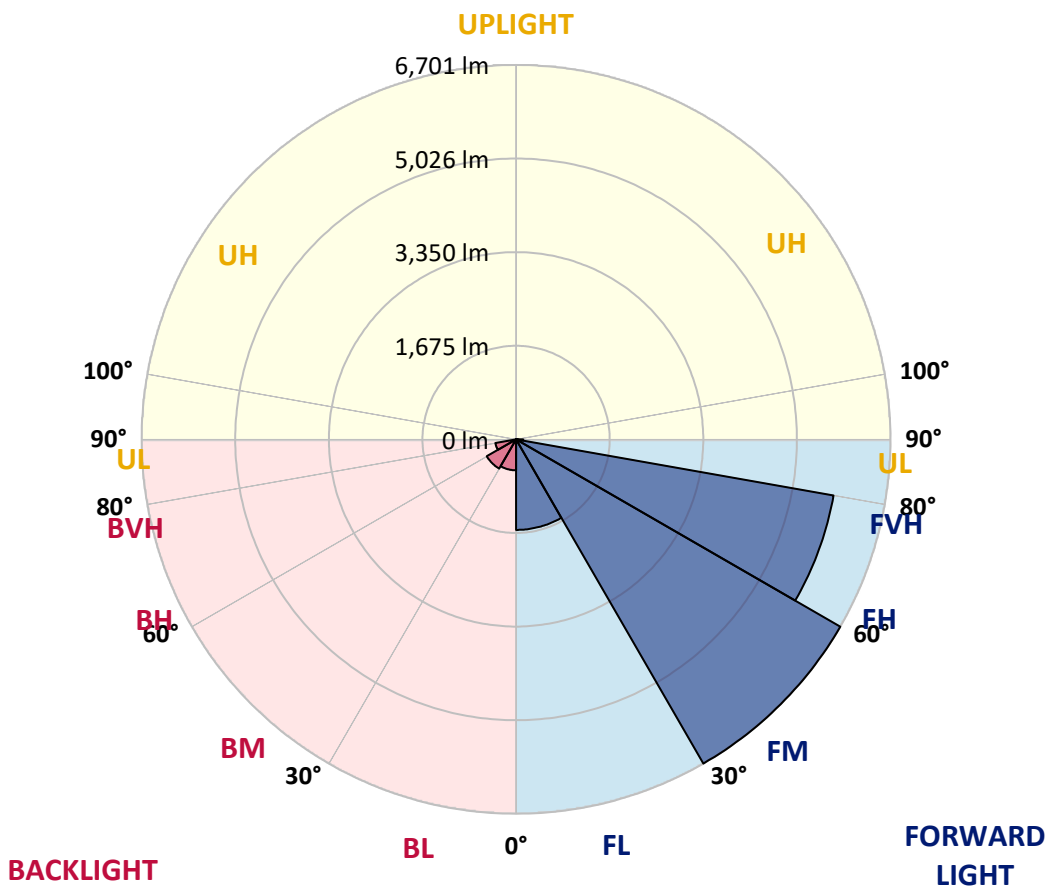
CATALOG NUMBER: GWS-SA4D-830-U-SL3-W-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1620.9	10.3			
FM (30°-60°)	6700.7	42.5			
FH (60°-80°)	5769.0	36.6			G3/7500
FVH (80°-90°)	126.1	0.8			G2/225
BL (0°-30°)	553.9	3.5	B2/1000		
BM (30°-60°)	604.0	3.8	B1/1000		
BH (60°-80°)	375.8	2.4	B1/500		G1/500
BVH (80°-90°)	5.6	0.0			G0/10
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G3

Type III Short





REPORT NUMBER: P637980

CATALOG NUMBER: GWS-SA4D-830-U-SL3-W-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	58°	65°	75°	85°
0°	4544.8	4544.8	4544.8	4544.8	4544.8	4544.8	4544.8	4544.8	4544.8	4544.8	4544.8
2.5°	4780.4	4788.8	4800.0	4813.9	4811.1	4798.6	4783.2	4748.4	4726.1	4656.3	4571.3
5°	4627.0	4625.7	4653.5	4680.0	4727.5	4752.6	4787.4	4755.3	4744.2	4660.5	4522.5
7.5°	4327.2	4342.6	4374.6	4416.5	4484.8	4558.7	4642.4	4632.6	4666.1	4610.3	4438.8
10°	4033.0	4024.6	4074.8	4137.6	4242.2	4337.0	4458.3	4456.9	4544.8	4539.2	4344.0
12.5°	3775.0	3773.6	3812.6	3883.8	4006.5	4139.0	4303.5	4307.7	4416.5	4461.1	4263.1
15°	3557.4	3560.2	3597.9	3671.8	3798.7	3960.5	4151.5	4186.4	4309.1	4399.7	4183.6
17.5°	3402.7	3404.0	3426.4	3490.5	3614.6	3787.5	4017.6	4065.1	4222.6	4353.7	4119.4
20°	3331.5	3326.0	3330.1	3362.2	3458.4	3616.0	3881.0	3942.3	4143.1	4321.6	4060.9
22.5°	3341.3	3332.9	3313.4	3309.2	3352.4	3472.4	3735.9	3811.2	4056.7	4302.1	4007.9
25°	3427.8	3409.6	3381.7	3339.9	3323.2	3383.1	3609.0	3687.1	3975.8	4303.5	3967.4
27.5°	3560.2	3540.7	3505.8	3450.1	3384.5	3359.4	3522.6	3596.5	3918.6	4335.6	3947.9
30°	3729.0	3713.6	3680.2	3613.2	3525.4	3422.2	3504.5	3565.8	3890.7	4401.1	3956.3
32.5°	3928.4	3917.2	3889.3	3828.0	3727.6	3570.0	3565.8	3613.2	3913.0	4496.0	3988.4
35°	4120.8	4125.0	4126.4	4092.9	3985.6	3794.5	3734.5	3751.3	4005.1	4638.2	4060.9
37.5°	4328.6	4318.9	4369.1	4392.8	4289.6	4086.0	3995.3	3996.7	4180.8	4848.8	4197.5
40°	4486.2	4489.0	4597.8	4695.4	4652.1	4455.5	4325.8	4324.4	4451.3	5137.4	4417.9
42.5°	4634.0	4652.1	4812.5	4979.9	5039.8	4865.5	4772.1	4737.2	4830.6	5527.9	4748.4
45°	4791.6	4818.1	5042.6	5281.1	5438.7	5335.5	5261.6	5275.5	5286.7	5982.5	5193.2
47.5°	4975.7	4992.4	5269.9	5606.0	5900.3	5873.8	5877.9	5861.2	5855.6	6555.7	5781.7
50°	5198.8	5237.9	5557.2	5958.8	6360.4	6536.2	6594.7	6601.7	6511.1	7180.4	6391.1
52.5°	5672.9	5720.4	5993.7	6345.1	6862.5	7232.0	7470.5	7423.1	7283.6	7785.7	7059.1
55°	6232.1	6268.4	6532.0	6895.9	7476.1	7994.8	8561.0	8541.5	8199.8	8423.0	7608.6
57.5°	6285.1	6325.6	6734.2	7292.0	8264.0	8937.5	9533.0	9595.8	9095.1	8874.8	8099.4
60°	5689.7	5772.0	6329.8	7080.0	8565.2	10205.2	10598.4	10611.0	9751.9	9333.6	8699.1
62.5°	4560.1	4599.2	5161.2	6140.1	8100.8	10944.3	12225.8	11960.9	10595.6	10043.4	9648.7
65°	2390.2	2549.2	3038.7	4122.2	6569.6	10686.3	14183.8	14111.2	12112.9	11060.0	10387.8
67.5°	1640.0	1638.6	1754.3	2149.0	3917.2	9201.1	15144.6	15942.3	13867.2	11408.6	9852.3
70°	1248.1	1252.3	1355.5	1612.1	2029.0	6124.8	14090.3	15454.2	14193.5	10358.6	7968.3
72.5°	828.4	836.7	1008.2	1302.5	1620.4	3002.4	10949.8	12365.3	11942.7	8319.8	5608.8
75°	495.1	502.0	624.7	946.9	1440.5	1680.4	6957.3	8548.5	8220.7	5734.3	3006.6
77.5°	203.6	209.2	320.7	589.9	1054.3	1305.3	3847.5	5593.5	4924.1	2280.1	821.4
80°	85.1	87.9	154.8	412.8	760.0	818.6	1782.2	2628.7	2017.9	490.9	251.0
82.5°	30.7	32.1	57.2	227.3	472.7	616.4	899.5	1038.9	569.0	160.4	135.3
85°	1.4	1.4	13.9	76.7	179.9	174.3	514.6	497.8	188.3	66.9	80.9
87.5°	0.0	0.0	1.4	1.4	2.8	7.0	48.8	86.5	40.4	16.7	34.9
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P637980

CATALOG NUMBER: GWS-SA4D-830-U-SL3-W-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	4544.8	4544.8	4544.8	4544.8	4544.8	4544.8	4544.8	4544.8	4544.8	4544.8	4544.8
2.5°	4515.5	4441.6	4360.7	4285.4	4165.5	4094.3	4006.5	3967.4	3911.7	3897.7	3906.1
5°	4423.4	4296.5	4102.7	3927.0	3699.7	3517.0	3332.9	3254.8	3154.4	3087.5	3059.6
7.5°	4293.8	4127.8	3825.2	3505.8	3193.5	2860.2	2606.4	2439.0	2287.0	2203.4	2186.6
10°	4162.7	3946.5	3512.8	3055.4	2571.5	2172.7	1829.6	1575.8	1369.4	1276.0	1203.5
12.5°	4027.4	3758.3	3194.9	2598.0	2036.0	1492.1	1068.2	821.4	673.6	615.0	624.7
15°	3903.3	3577.0	2879.7	2140.6	1433.6	900.9	589.9	497.8	463.0	451.8	450.4
17.5°	3784.8	3405.4	2565.9	1695.7	945.5	552.2	451.8	429.5	419.8	414.2	414.2
20°	3677.4	3240.9	2259.1	1277.4	610.8	437.9	408.6	397.4	389.1	384.9	384.9
22.5°	3577.0	3081.9	1959.3	903.7	450.4	393.3	375.1	364.0	354.2	348.6	348.6
25°	3486.3	2938.3	1673.4	622.0	387.7	359.8	340.3	327.7	311.0	301.2	301.2
27.5°	3420.8	2810.0	1398.7	453.2	350.0	323.5	301.2	284.5	266.4	255.2	252.4
30°	3381.7	2701.2	1121.2	372.3	315.2	288.7	263.6	242.6	221.7	210.6	209.2
32.5°	3359.4	2600.8	867.4	324.9	285.9	255.2	227.3	205.0	184.1	171.5	170.1
35°	3367.8	2522.7	649.9	292.9	258.0	225.9	195.2	172.9	154.8	143.6	140.8
37.5°	3440.3	2487.8	488.1	267.7	234.3	200.8	168.7	147.8	131.1	122.7	121.3
40°	3581.2	2494.8	383.5	248.2	214.8	175.7	145.0	125.5	113.0	106.0	104.6
42.5°	3800.1	2553.4	316.6	231.5	193.8	153.4	125.5	110.2	97.6	90.6	89.2
45°	4126.4	2674.7	276.1	212.0	171.5	132.5	108.8	94.8	83.7	75.3	73.9
47.5°	4599.2	2885.3	249.6	193.8	152.0	114.4	93.4	79.5	69.7	62.8	61.4
50°	5102.6	3137.7	227.3	175.7	135.3	99.0	79.5	65.5	57.2	50.2	48.8
52.5°	5639.5	3409.6	210.6	159.0	119.9	85.1	66.9	54.4	46.0	39.0	37.7
55°	6155.5	3683.0	191.1	147.8	101.8	72.5	55.8	44.6	36.3	30.7	30.7
57.5°	6657.5	3934.0	170.1	129.7	83.7	61.4	46.0	36.3	29.3	25.1	23.7
60°	7257.1	4281.2	146.4	110.2	69.7	51.6	37.7	29.3	23.7	19.5	19.5
62.5°	8148.2	4642.4	125.5	92.0	58.6	43.2	30.7	23.7	19.5	16.7	15.3
65°	8439.7	4447.2	106.0	75.3	47.4	34.9	25.1	20.9	16.7	15.3	13.9
67.5°	7661.5	3645.3	87.9	61.4	39.0	29.3	22.3	18.1	15.3	13.9	12.6
70°	5978.3	2586.9	68.3	46.0	32.1	23.7	19.5	16.7	13.9	12.6	12.6
72.5°	4066.4	1529.8	54.4	34.9	26.5	20.9	16.7	15.3	13.9	12.6	11.2
75°	2002.5	543.9	41.8	26.5	20.9	18.1	15.3	13.9	12.6	11.2	11.2
77.5°	539.7	150.6	32.1	20.9	16.7	13.9	13.9	13.9	12.6	9.8	9.8
80°	182.7	62.8	23.7	15.3	13.9	11.2	9.8	12.6	11.2	9.8	8.4
82.5°	100.4	30.7	16.7	12.6	9.8	8.4	8.4	8.4	8.4	7.0	7.0
85°	64.1	16.7	11.2	9.8	9.8	7.0	5.6	5.6	4.2	4.2	4.2
87.5°	29.3	9.8	9.8	8.4	8.4	7.0	4.2	2.8	1.4	1.4	1.4
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269



LM-79-2019: Approved Method: Electrical and Photometric Measurements of Solid-State Lighting Products

Report Prepared for

Cooper Lighting Solutions

MCGRAW EDISON

Report Number: SP1-2408-195-9

Test Date: 08/07/2024

Luminaire Tested: GALN-SB1A-830-U-5WQ

Data in this report applies to families of products including GALN-SB1A-830-U-5WQ.

Test Information

Test Method: LM-79-2019
 Report Number: SP1-2408-195-9
 Test Lab: COOPER LIGHTING SOLUTIONS
 Photometer: SP1 - 76IN SPHERE
 Measurement Geometry: 4π
 Issue Date: 08/07/2024
 Manufacturer: COOPER LIGHTING SOLUTIONS
 Product Line: MCGRAW EDISON
 Catalog Number: **GALN-SB1A-830-U-5WQ**
 Description: GALLEON AREA AND ROADWAY LUMINAIRE. (1) 80 CRI, 3000K, 350MA HIGH DENSITY LIGHTSQUARE WITH 26 LEDS AND TYPE V WIDE OPTICS

Spectral Parameters

CCT (K): 3050
 CIE u': 0.2476
 CIE v': 0.5251
 Duv: 0.0034
 CIE x: 0.4383
 CIE y: 0.4131
 CIE z: 0.1487
 Peak Wavelength (nm): 603
 Dominant Wavelength (nm): 581
 Purity: 55.55201
 Rf: 81.5
 Rg: 99.2

CRI (Ra):	81.0		
R1:	79.6	R9:	7.1
R2:	85.6	R10:	67.0
R3:	92.0	R11:	82.7
R4:	82.6	R12:	63.2
R5:	78.9	R13:	80.3
R6:	81.7	R14:	95.0
R7:	85.2	R15:	71.7
R8:	62.0		



Test Conditions

Stabilization Time: 20M
 Operation Time: 1H 20M
 Sphere Temperature (°C): 24.2

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Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	IN0058	6/18/2024	12/18/2024
Power Meter	INXT2011004	2/8/2024	2/8/2025
AC Power Source	IN0063	10/24/2023	10/24/2024
DC Power Source	IN0208	10/24/2023	10/24/2024
Sphere Thermometer	IN0085	10/24/2023	10/24/2024
Room Thermometer	IN0046	10/24/2023	10/24/2024

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CIE 1931 Chromaticity Diagram



CIE 1931 Chromaticity Diagram with 2017 ANSI 7-Step and 4-Step Quadrangles



Point lies inside the ANSI 3000K 4-step quadrangle

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Photopic Flux vs. Wavelength



Photopic Lumens: NR

λ (nm)	Power W [^] /nm	Lumens (ϕ /nm)	λ (nm)	Power W [^] /nm	Lumens (ϕ /nm)	λ (nm)	Power W [^] /nm	Lumens (ϕ /nm)	λ (nm)	Power W [^] /nm	Lumens (ϕ /nm)	λ (nm)	Power W [^] /nm	Lumens (ϕ /nm)
360	0	NR	490	168	NR	620	940	NR	750	35	NR	880	1	NR
365	0	NR	495	233	NR	625	897	NR	755	30	NR	885	1	NR
370	0	NR	500	300	NR	630	847	NR	760	26	NR	890	1	NR
375	0	NR	505	372	NR	635	790	NR	765	22	NR	895	1	NR
380	0	NR	510	430	NR	640	730	NR	770	19	NR	900	1	NR
385	0	NR	515	483	NR	645	668	NR	775	16	NR	905	1	NR
390	0	NR	520	524	NR	650	605	NR	780	14	NR	910	0	NR
395	2	NR	525	555	NR	655	545	NR	785	12	NR	915	0	NR
400	4	NR	530	581	NR	660	485	NR	790	10	NR	920	0	NR
405	7	NR	535	604	NR	665	430	NR	795	9	NR	925	0	NR
410	17	NR	540	623	NR	670	378	NR	800	8	NR	930	0	NR
415	34	NR	545	645	NR	675	331	NR	805	7	NR	935	0	NR
420	68	NR	550	667	NR	680	290	NR	810	6	NR	940	0	NR
425	128	NR	555	693	NR	685	251	NR	815	5	NR	945	0	NR
430	214	NR	560	719	NR	690	218	NR	820	4	NR	950	0	NR
435	339	NR	565	754	NR	695	188	NR	825	4	NR	955	0	NR
440	507	NR	570	791	NR	700	162	NR	830	3	NR	960	0	NR
445	573	NR	575	830	NR	705	139	NR	835	3	NR	965	0	NR
450	356	NR	580	873	NR	710	119	NR	840	3	NR	970	0	NR
455	217	NR	585	913	NR	715	102	NR	845	2	NR	975	0	NR
460	168	NR	590	948	NR	720	88	NR	850	2	NR	980	0	NR
465	113	NR	595	974	NR	725	76	NR	855	2	NR	985	0	NR
470	85	NR	600	994	NR	730	65	NR	860	1	NR	990	0	NR
475	85	NR	605	998	NR	735	55	NR	865	1	NR	995	0	NR
480	94	NR	610	994	NR	740	47	NR	870	1	NR	1000	0	NR
485	120	NR	615	973	NR	745	41	NR	875	1	NR			

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Scotopic Flux vs. Wavelength



Scotopic Lumens: NR

S/P: 1.27

λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)
360	0	NR	490	168	NR	620	940	NR	750	35	NR	880	1	NR
365	0	NR	495	233	NR	625	897	NR	755	30	NR	885	1	NR
370	0	NR	500	300	NR	630	847	NR	760	26	NR	890	1	NR
375	0	NR	505	372	NR	635	790	NR	765	22	NR	895	1	NR
380	0	NR	510	430	NR	640	730	NR	770	19	NR	900	1	NR
385	0	NR	515	483	NR	645	668	NR	775	16	NR	905	1	NR
390	0	NR	520	524	NR	650	605	NR	780	14	NR	910	0	NR
395	2	NR	525	555	NR	655	545	NR	785	12	NR	915	0	NR
400	4	NR	530	581	NR	660	485	NR	790	10	NR	920	0	NR
405	7	NR	535	604	NR	665	430	NR	795	9	NR	925	0	NR
410	17	NR	540	623	NR	670	378	NR	800	8	NR	930	0	NR
415	34	NR	545	645	NR	675	331	NR	805	7	NR	935	0	NR
420	68	NR	550	667	NR	680	290	NR	810	6	NR	940	0	NR
425	128	NR	555	693	NR	685	251	NR	815	5	NR	945	0	NR
430	214	NR	560	719	NR	690	218	NR	820	4	NR	950	0	NR
435	339	NR	565	754	NR	695	188	NR	825	4	NR	955	0	NR
440	507	NR	570	791	NR	700	162	NR	830	3	NR	960	0	NR
445	573	NR	575	830	NR	705	139	NR	835	3	NR	965	0	NR
450	356	NR	580	873	NR	710	119	NR	840	3	NR	970	0	NR
455	217	NR	585	913	NR	715	102	NR	845	2	NR	975	0	NR
460	168	NR	590	948	NR	720	88	NR	850	2	NR	980	0	NR
465	113	NR	595	974	NR	725	76	NR	855	2	NR	985	0	NR
470	85	NR	600	994	NR	730	65	NR	860	1	NR	990	0	NR
475	85	NR	605	998	NR	735	55	NR	865	1	NR	995	0	NR
480	94	NR	610	994	NR	740	47	NR	870	1	NR	1000	0	NR
485	120	NR	615	973	NR	745	41	NR	875	1	NR			

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Melanopic Flux vs. Wavelength



Melanopic Lumens: NR

M/P: 2.32

λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)
360	0	NR	490	168	NR	620	940	NR	750	35	NR	880	1	NR
365	0	NR	495	233	NR	625	897	NR	755	30	NR	885	1	NR
370	0	NR	500	300	NR	630	847	NR	760	26	NR	890	1	NR
375	0	NR	505	372	NR	635	790	NR	765	22	NR	895	1	NR
380	0	NR	510	430	NR	640	730	NR	770	19	NR	900	1	NR
385	0	NR	515	483	NR	645	668	NR	775	16	NR	905	1	NR
390	0	NR	520	524	NR	650	605	NR	780	14	NR	910	0	NR
395	2	NR	525	555	NR	655	545	NR	785	12	NR	915	0	NR
400	4	NR	530	581	NR	660	485	NR	790	10	NR	920	0	NR
405	7	NR	535	604	NR	665	430	NR	795	9	NR	925	0	NR
410	17	NR	540	623	NR	670	378	NR	800	8	NR	930	0	NR
415	34	NR	545	645	NR	675	331	NR	805	7	NR	935	0	NR
420	68	NR	550	667	NR	680	290	NR	810	6	NR	940	0	NR
425	128	NR	555	693	NR	685	251	NR	815	5	NR	945	0	NR
430	214	NR	560	719	NR	690	218	NR	820	4	NR	950	0	NR
435	339	NR	565	754	NR	695	188	NR	825	4	NR	955	0	NR
440	507	NR	570	791	NR	700	162	NR	830	3	NR	960	0	NR
445	573	NR	575	830	NR	705	139	NR	835	3	NR	965	0	NR
450	356	NR	580	873	NR	710	119	NR	840	3	NR	970	0	NR
455	217	NR	585	913	NR	715	102	NR	845	2	NR	975	0	NR
460	168	NR	590	948	NR	720	88	NR	850	2	NR	980	0	NR
465	113	NR	595	974	NR	725	76	NR	855	2	NR	985	0	NR
470	85	NR	600	994	NR	730	65	NR	860	1	NR	990	0	NR
475	85	NR	605	998	NR	735	55	NR	865	1	NR	995	0	NR
480	94	NR	610	994	NR	740	47	NR	870	1	NR	1000	0	NR
485	120	NR	615	973	NR	745	41	NR	875	1	NR			

Summary

$R_f = 81.5$
 $R_g = 99.2$
 $CIE R_a = 81.0$
 $R_9 = 7.1$



Color Vector Graphics



Individual Sample Fidelity Index ($R_{f,i}$)

CES01 = 86	CES26 = 74	CES51 = 89	CES76 = 70
CES02 = 63	CES27 = 88	CES52 = 92	CES77 = 86
CES03 = 31	CES28 = 89	CES53 = 81	CES78 = 72
CES04 = 70	CES29 = 67	CES54 = 87	CES79 = 90
CES05 = 50	CES30 = 68	CES55 = 85	CES80 = 88
CES06 = 51	CES31 = 71	CES56 = 78	CES81 = 78
CES07 = 42	CES32 = 70	CES57 = 76	CES82 = 95
CES08 = 41	CES33 = 71	CES58 = 78	CES83 = 90
CES09 = 29	CES34 = 82	CES59 = 92	CES84 = 94
CES10 = 76	CES35 = 90	CES60 = 95	CES85 = 86
CES11 = 59	CES36 = 93	CES61 = 93	CES86 = 72
CES12 = 65	CES37 = 87	CES62 = 83	CES87 = 85
CES13 = 43	CES38 = 75	CES63 = 77	CES88 = 83
CES14 = 74	CES39 = 94	CES64 = 83	CES89 = 75
CES15 = 71	CES40 = 89	CES65 = 77	CES90 = 81
CES16 = 47	CES41 = 85	CES66 = 80	CES91 = 96
CES17 = 50	CES42 = 86	CES67 = 79	CES92 = 73
CES18 = 56	CES43 = 81	CES68 = 84	CES93 = 84
CES19 = 72	CES44 = 99	CES69 = 91	CES94 = 64
CES20 = 66	CES45 = 87	CES70 = 78	CES95 = 80
CES21 = 87	CES46 = 82	CES71 = 76	CES96 = 84
CES22 = 79	CES47 = 77	CES72 = 92	CES97 = 87
CES23 = 92	CES48 = 71	CES73 = 71	CES98 = 81
CES24 = 91	CES49 = 81	CES74 = 93	CES99 = 74
CES25 = 72	CES50 = 89	CES75 = 74	



Color Rendition by Hue-Angle Bin



Measure Comparisons



(END OF REPORT)